

Ep #127: Knees: Climbing and Descending Stairs More Easily



Full Episode Transcript

With Your Host

Susi Hately

[From Pain to Possibility](#) with Susi Hately

Ep #127: Knees: Climbing and Descending Stairs More Easily

Male Announcer: You're listening to *From Pain to Possibility* with Susi Hately. You will hear Susi's best ideas on how to reduce or even eradicate your pain and learn how to listen to your body when it whispers so you don't have to hear it scream. And now here's your host, Susi Hately.

Welcome and welcome back. I'm so delighted that you're here because today we're going to talk about climbing and descending stairs or other inclines, like when you're out hiking. And what I'm going to share are some key things that I have found in my practice, both with the private clientele that I have, as well as the trainees that I work with. And when they teach what I'm teaching them, they also have really great gains.

So this is going to be an episode of what I have found to be super helpful in terms of helping people climb and descend stairs with less or no pain. And that means whether it's in their foot, around their ankle, around their knee, up into their hips, their SI, or their back. I'm not doing this around one specific joint.

And the reason for this is because I consistently see people who have very similar myofascial patterning. Like the limitations in their myofascial patterning might be very, very similar. How that myofascial patterning is being expressed, though, in terms of pain or strain is different.

So someone might have a similar myofascial patterning in the way that their leg bones move in their hip socket, for example. And yet, they might feel the issue in their knee where someone might feel it in their piriformis, or someone might feel it as plantar fasciitis, or they might feel it as back pain. But they might have something very, very similar going on mechanically.

So that's why I want to make this more of a global view of what we're looking at when we're climbing and descending incline. And for you to kind of noodle around, as I like to say, or think about how this might relate to your own body or to the clients that you are seeing.

Ep #127: Knees: Climbing and Descending Stairs More Easily

So as you listen to the episode, allow for, whether it's your scenario or whether it's a client scenario, just allow that to really settle for you as you hear what I'm sharing because I think it'll be really interesting for you to explore the things that really work well in my practice.

And a couple of things I want to mention is that a lot of my clients are well over the age of 60 and they're getting better. Their pain is reducing or eradicating, they're able to go up and down inclines, stairs, mountains. And I'm saying that because I really want to scream from the rooftops, with lots of love of course, that your tissue can change at any age.

That yes, living in an older body is different, there's no doubt. I mean, we're older. However, how we work with it really can lead to a fundamental change that's very effective and very positive. So your tissue can change no matter your age is one of the messages I want to share with you on this episode.

Now, if you find what I'm sharing really super helpful, two things that you can do is send us an email. And you can reach out to us if you want our help, health@functionalsynergy.com if you're wanting to help in private sessions. Or if you want to enroll in our certification program where we teach you the foundational concepts for helping clients get out of pain, reduce pain, other symptoms, and also build a business doing so.

We're really big on having you experience a return on your investment and really making this a business for yourself. Whether that's part-time retirement income, full-time retirement income, or you're moving out of your job into something more holistic like this as a yoga therapist. So do reach out to us. We'd love, love, love to chat with you.

The other way that you can take your learning deeper is to head over to the YouTube channel. We will be starting some live streams coming up where I'll be teaching more of these concepts and you'll be able to see me on video teaching the ideas that I share and that have worked really well in my practice.

[From Pain to Possibility](#) with Susi Hatelly

Ep #127: Knees: Climbing and Descending Stairs More Easily

So head over to YouTube and subscribe to the Susi Hatley channel and you'll get access to those YouTube live streams, they're going to be so much fun. I love, love, love, love teaching. I love teaching the possibility for people that they can get out of pain. And it would be a dream for me to be able to see you over on YouTube.

So let's shift gears into walking up stairs, down stairs, up an incline, down an incline, up a mountain, down a mountain. Now a lot of times when you google, or I Google, the motion of walking upstairs or an incline and then walking down, a lot of the conversation is around hamstrings, glutes, quads, calves.

And rightly so because when you look at the movement, there is a lot of flexion and extension. Flexion and extension through both that hip and the knee, and there's dorsiflexion and plantar flexion along with a bit of pronation and supination through the foot. So muscles that cause flexion and extension are obviously going to be top of mind because that's the primary movement that's being done to go up and down an incline.

I find though, that many clients who come to see me are doing that work and they're still not getting out of pain. And they might have a structural reasoning for why that is. So whether there's some arthritis in the knee, whether there's patella femoral syndrome, whether there's IT band issues, piriformis issues, bursitis, SI joint issues, plantar fasciitis, back pain of any sort they can come up with because they've been diagnosed with a structural issue.

And then they'll kind of leave that over on the side. I'm like, well, that's why they can't, this is what they'll say to me, "This is why I can't do this without pain." And then we'll get into understanding the mechanics of going up and down. And while there is these movements of flexion, extension, dorsiflexion, and plantar flexion, what I also share with them is that there are these other things that need to happen for bones to move in a joint. And I've shared this a lot on the podcast.

Ep #127: Knees: Climbing and Descending Stairs More Easily

And when we're looking at the movement of the leg, yes, there's flexion and extension, but in order for the leg to move in flexion and extension, they need support through the abductors, adductors, and the rotators. So from a biomechanical lens we talk about this in terms of planes of movement.

And we have these three planes, sagittal, frontal, and transverse plane. And that act of climbing up and going down the hill or the stairs is a movement mostly in the sagittal plane where we're looking specifically at the hip and the knee. And as I've mentioned, very much so at the ankle, even though there's also supination and pronation through the foot, which is important.

But I'm highlighting those all three joints because they all have flexion and extension going on, so it's important. And in order for flexion and extension to occur, and to occur well, we need to keep the movement supported. And that's where the transverse and the frontal planes come in.

So transverse plane is the rotationary plane, and frontal plane is abduction adduction plane. So we need to have the abductor, adductors and transverse, i.e. rotator muscles of the hip well on board to support the movement up and down the stairs. And a lot of times when you look at what's online, is a lot of folks don't actually address that specifically.

And when you can think about that, it really changes the game because if you don't have a well-functioning hip joint, i.e. the abductors, adductors, and rotators are not functioning well, they're not online for whatever reason, then that's going to impact the way the femur moves in the knee joint.

Because remember, the knee, the top of the knee is the bottom of the femur. The bottom of the knee is the top of the tibia. And each of those bones form the joint further afield, right, the tibia forms the ankle, the femur forms at the hip.

So if you don't have great stability up in the hip, that's going to impact the way the femur moves on the tibial plateau, that's going to impact the knee.

[From Pain to Possibility](#) with Susi Hatley

Ep #127: Knees: Climbing and Descending Stairs More Easily

And that can then impact further down into the foot. And we have seen a relationship between how the foot moves through the gait pattern and what goes on at the hip.

So when those abductors, adductors, rotators are not functioning well in connection with the foot movement, then that can have some interesting consequences. And I use interesting, obviously, in air quotes. But it can really impact the ability to both climb and descend. So we need to keep that in mind.

And so while you may be someone, because I know in the yoga industry there's a lot of focus in on release, release, release, release, release. And while releasing is great, when we can actually provide better stability in our hip, that can actually create really amazing release because stability is present.

Think about it this way, the psoas muscle, as an example, is a primary hip flexor according to some people in the anatomy world. And a lot of people feel like it's really, really tight as it crosses the hip. Like it has that feeling of tightness, it can have a feeling of shortness. And it can limit the way the spine and the leg bone move, which interestingly can be impactful for how you climb and descend stairs or inclines.

And a lot of people will spend a lot of time stretching out this area, like stretching out the hip flexors in addition to the psoas because the psoas is part of the hip flexor group of muscles. And you can stretch that thing out, you can go to body workers and they can really sit and do all this amazing bodywork.

And you leave the table, and you get off the table, you walk around and you're like, "Oh, God, that feels amazing." Like it truly can feel awesome. And in order for that awesomeness to last, to have stamina, you need to have support elsewhere. The pelvis needs to have support.

Ep #127: Knees: Climbing and Descending Stairs More Easily

The way that leg bone sits in the hip socket has to be supported by abductor adductor rotators. There needs to be support between the pelvis and the spine through some of the deep core muscles as well as some of the superficial muscles that connect between the pelvis and the ribcage. If you don't have that, then your stamina for maintaining that release through the hip flexors is not going to last very long.

So when I'm working with people I like to focus in strongly and specifically, and what I mean by strongly is I do mean specifically, and with focus on the abductor, and adductors, and rotators and really getting those muscle groups honed in. And one of the ways I do that is I focus in on movements that ask for abduction, adduction, and rotation. And I make sure that the hip flexors aren't involved.

And if they have a chance to get involved I take really strong notice of if the hip flexors are wanting to get involved. Because if the hip flexors are getting involved in a movement that is primarily abduction, adduction, or rotation, then we're compensating and we're creating neuromuscular patterns and habitual patterns that don't serve the stability function that we're trying to gain.

I also look at breathing and if someone is bracing through their ribcage, because that can have an impact on the way that the muscles connect between the ribs and the pelvis. It can have an impact on the way that psoas functions because the psoas interrelates with the diaphragm, right? It interweaves of the diaphragm, it has fascial connections to it. And that can have a huge impact.

Also, the braced breathing on the pelvic floor. The pelvic floor is a part of the stabilizing feature of the pelvis, right? So when I can just pull it way, way, way back and simply say, okay, let's get the leg bone moving well without all this other extraneous work happening. Can we reduce the bracing? Can we improve the breathing while moving the leg bone? And can we have the leg bone moving smoothly, more coordinated so that it and the muscles around it can actually do the job they're designed to do?

[From Pain to Possibility](#) with Susi Hatley

Ep #127: Knees: Climbing and Descending Stairs More Easily

And when that happens, what's super cool is that there's more smoothness, there's more coordination, there's more stability, way more ease. Your system will feel like it's more downregulated. And you'll also feel stronger because now the muscles and tissue that are meant to be doing the job are actually doing the job.

So that's the first place that I play with. And to give you sort of specifics about like specific exercises I do, go to the YouTube channel, and the links will be on the main website page of this episode. And I'll guide you to some key videos that you can look at of how I do this, okay? Because it's really cluing into the way you move.

So many people are unaware of how they move and they just move or they just do their exercises, but aren't focusing in on the way that they're actually moving. And that can get in the way of their process.

So then when someone has that basic understanding and they're more aware of the way that their leg bone moves, the way that their knee and their hip moves. The way that their hip and their knee and their foot function together. The way that functioning works with their pelvis and their spine and their ribcage, now I can take them up into standing.

And a key thing that we do when we're training climbing or descending is I take a yoga block, which tends to be a lot smaller in height or shorter in height than a typical stair step. And I ask them to place their foot, one foot onto the block. So the knee will be bent in flexion in the hip will be bent in flexion. And then I ask them to step up on the block and I watch for what happens mechanically.

Does their foot fall inward? Does the knee fall inward? Does the footfall outward? Does it get more supinated? Does the knee fall outward? Do they lean way forward with their upper body? Do they lean back with their upper body? Do they collapse on one side? Does the hip collapse on one side? So then I get to see what they do.

Ep #127: Knees: Climbing and Descending Stairs More Easily

Now, here's what I don't do, I don't go into a song and dance about what muscles are meant to be involved. Rather what I do is I say, okay, now we see what's going on, place your foot back onto the block and be aware of three points on the bottom of your foot. The center of the heel, the ball of the foot, and the base of the pinky toe. Place that on the block and feel those three points.

Now, those three points do correspond to the arches of the foot. And then I ask them just to feel those as they lift up. And then I bring them off the block again. Then what I'll ask them to do is place that foot back on the block and then have them really tune in to their knee and their hip.

And when they start to straighten through their knee and straighten through their hip, so they're extending their knee and their hip, I have them really feel that motion of their legs. Not so much the muscles do I have them focus on, but the actual segment of their thigh bone and their pelvis.

And what's so interesting is to watch someone's brain and awareness grow about the segments of their body and what then happens. Because then they begin to see this relationship between, oh wow, I'm really holding my breath. Or I'm really bracing in my abdomen or my back. Or wow, my pelvis really wants to duck tail, or tilt, or tuck. Or man, I can hardly get up.

And so sometimes that movement of being difficult to get up and straighten up onto the block, like straighten through that standing leg onto the block, it's difficult because it might be a coordinated pattern that they need to grow, right? And so it's just they're getting online. So it usually takes four or five repetitions in a session, and then they start to get it.

At that point, when they start to get it, I then bring them over to the stairs, or if I'm Zooming I'll then get them to come over to their stairs. And this is where we start to play with the higher height. And when they get into a higher height, we're now asking for more range of motion through the hip, the knee and the ankle.

Ep #127: Knees: Climbing and Descending Stairs More Easily

So we'll often see the typical patterns that they compensated with show up in this way. And then we just bring them back to, all right, feel your foot, feel the shinbone, feel thigh bone, feel pelvis, feel spine, feel ribs. Now, what do you notice as you come up? And so sometimes they have to kind of figure it out a little bit, in terms of feeling their body parts, but then they start to get it.

Now here's why what I've done is beneficial, is they're learning how to put their whole foot on the stair step and they're feeling a base of support from the foot. Then they're starting to notice if there's any wonkiness from their foot to their hip, because their hip and their foot are connected. And if the outer hip, or the inner hip, or the rotators of the hip are not working well, we'll see that as a deviation in the movement.

We should see something pure in terms of flexion and extension. But if it's not, if there's some sort of limitation, we'll find some part of their leg or their pelvis deviating out of the direction we want it to go. And in that case, I then might say, like let's say the leg wants to fall inward, which is really, really common. I might say, okay, let's bring your hand to the outside of the thigh. And gently press the thigh out into the hand as you move up onto the stair.

So you're pressing out, so there's a bit of abduction with a tiny bit of rotation on that thigh. So the abductors are getting involved. Now notice as you straighten up onto the standing leg on that stair, now what do you feel? And so now they're starting to clue in between their foot placement, their thigh placement, which is arising out of their hip.

And oftentimes what's really cool is they start to see the relationship between the arch of their foot and abductors of their hip. Because when they notice that leg is falling inward, they likely notice how their foot flattens or kind of goes into more pronation than is needed. And when they press their leg out into their hand, they notice that the arch of the foot lifts as that outer hip starts to gain better function. And overall, then the whole kinetic chain between their hip and their foot work better.

Ep #127: Knees: Climbing and Descending Stairs More Easily

So that awareness can be really interesting for people. And then we might tie in other exercises to help them improve the connection between the foot and the hip. We might have them learn how to come out of a chair. Maybe taking the height of the chair, maybe we put a bunch of blocks on the chair so they don't have to sit all the way down to the chair.

But they start to learn how to track their hips to their foot, not because of some alignment conversation which might create rigidity, but rather really getting curious about the way their legs move and what happens when they maybe put their hands on the outside of their thighs as an example. What happens when they improve the way that the leg bone is functioning and moving in the hip socket with their feet.

And then as they start to gain that better coordination, they actually have an inherent underlying control that's not rigid. It's way more easeful, they gain much more nimbleness and agility in the way that they move and they lose their balance. If they fall off of center a little bit, they can grab themselves more easily and not fall down.

And this becomes really powerful for my older clientele where balance might be becoming an issue. And they can regain that neuromuscular patterning and that connection with their brain and their body so much more effectively.

Now you might ask, well, what do you do when you're climbing down the stairs? The same thing. The difference now with climbing down the stairs is that often the knee is tracking forward of the toes and that can sometimes be challenging for people. It's not dangerous. I mean, it's a movement pattern that we do. It might be circumspect for people with certain scenarios going on within their knees, their ankles, or their hips.

But I have found, again, that when I can support someone improving their function, no matter what that structural issue is, we can improve the way the forces are moving and dissipating through them and their tissue just absorbs the load so much better. So much better.

[From Pain to Possibility](#) with Susi Hatelly

Ep #127: Knees: Climbing and Descending Stairs More Easily

And then they find that the structural issues don't necessarily have the same pain output. And that becomes very, very powerful whether they're doing stairs, or whether they're doing inclines, or whether they're doing like full on hikes. It can really change up the way that that's experienced.

If this is resonating, then do go visit the website podcast page, functionalsynergy.com/podcast. You'll see this podcast there, you'll see the link to the YouTube videos. Or go directly over to the YouTube channel at Susi Hately, which is my YouTube handle, and you'll find so many sequences which can support you in the improvement of your movement going up and down stairs.

And what I really recommend you do is to subscribe because I'm starting live streams over there and I'm so excited to be able to be teaching you in small little chunks, using my skeleton showing you how I work with people. Like why is it my results are so darn good with my clientele? I'd be happy to show you. So do head over there subscribe so you can be notified when we start it up.

And if you would like my help privately or through our certification program, do send us an email, health@functionalsynergy.com. Happy exploring, take care.

If this episode has resonated and you're looking to deepen this idea of getting your body back on board, of listening deeply to your symptoms, of listening to the whispers so you don't have to hear the screams and you're looking for one to one support or professional training, then reach out to us at health@functionalsynergy.com where we can customize your learning path. That's health@functionalsynergy.com. Looking forward to hearing from you.